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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,737	10/15/2003	Richard A. Rubin	97,022-D1-CO	6145

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MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 S. WACKER DRIVE
32ND FLOOR
CHICAGO, IL 60606

EXAMINER	
SKIBINSKY, ANNA	

ART UNIT	PAPER NUMBER
1631	

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/685,737	RUBIN ET AL.	
	Examiner	Art Unit	
	Anna Skibinsky	1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *5/19/2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-39* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-8 and 33, drawn to a method for identifying compounds that induce internalization of cell surface receptor proteins, classified in class 702, subclass 19.

If this Group is chosen, the one election from each of the below listed species A, B, and C is required.

II. Claims 9-16 and 34, drawn to a method for identifying compounds that inhibit internalization of cell surface receptor proteins, classified in class 702, subclass 19.

If this Group is chosen, the one election from each of the below listed species D, E, and F is required.

III. Claims17-24 and 35, drawn to a method for identifying compounds that induce internalization of cell surface receptor proteins, classified in class 702, subclass 19.

If this Group is chosen, the one election from each of the below listed species G, H, and I is required.

VI. Claims 25-32 and 36, drawn to a method for identifying compounds that inhibit internalization of cell surface receptor proteins, classified in class 702, subclass 19.

If this Group is chosen, the one election from each of the below listed species J, K, and L is required.

V. Claims 37-39, drawn to a kit for identifying compounds that induce or inhibit internalization of cell surface proteins, classified in class 435, subclass 283.1.

This inventions are distinct, each from the other because of the following reasons:

Groups I and II are distinct from Groups III and IV because Groups III and IV require selectively scanning the cells in a high throughput, high content mode while Groups I and II require scanning multiple cells in each of the locations containing multiple cells to obtain luminescent signals form the luminescently-labeled cell surface receptor protein.

Groups I and II are distinct each from the other because the method steps in the Groups are divergent. Group II is a method for identifying compounds that inhibit internalization of cell surface proteins and requires the additional method step of treating cells with a ligand.

Groups III and IV are distinct each from the other because the method steps in the Groups are divergent. Group IV is a method for identify identifying compounds that

inhibit internalization of cell surface proteins and requires the additional method step of treating cells with a ligand.

The inventions of Groups [I-VI], drawn to methods as listed above, are each unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the inventions of Groups [I-IV], each have different steps and/or limitations directed to different results, and therefore have different modes of operation.

Group V is a distinct invention from the inventions of Groups I-IV because Group V is a kit for identifying compounds and includes an antibody, instructions for using the antibody and a surface receptor protein. The system of Group V is directed toward a different invention than the function of method steps of Groups I-IV and therefore is distinct.

Species Elections Regarding Group I

One election from each of species A, B, and C is required.

Specie (A)

Where in the cell surface receptor protein is

A1: expressed as a luminescently labeled protein (e.g. claim 1)

A2: luminescently labeled by contancting the cell with a luminescently labeled molecule that binds to the cell surface receptor of interest (e.g. claim 1)

Specie (B)

The method of claim 5 further comprises

B1: removing artifacts from the object image (e.g. claim 6a)

B2: correcting from background luminescence (e.g. claim 6b)

Specie (C)

The method of claim 5 further comprising measuring

C1: a number of objects that were determined to represent valid internalization cell surface receptors (e.g. claim 7a)

C2: an aggregate area of the objects that were determined to represent valid internalized cell surface receptors (e.g. claim 7b)

C3: an aggregate intensity area of the objects that were determined to represent valid internalized cell surface receptors (e.g. claim 7c)

C4: a normalized aggregate intensity area of the objects that were determined to represent valid internalized cell surface receptors (e.g. claim 7d)

Claims 2-5, 8 and 33 are generic to this species.

Species Elections Regarding Group II

One election from each of species D, E, and F is required.

Specie (D)

Where in the cell surface receptor protein is

A1: expressed as a luminescently labeled protein (e.g. claim 9)

A2: luminescently labeled by contancting the cell with a luminescently labeled molecule that binds to the cell surface receptor of interest (e.g. claim 9)

Specie (E)

The method of claim 13 further comprises

B1: removing artifacts from the object image (e.g. claim 14a)

B2: correcting from background luminescence (e.g. claim 14b)

Specie (F)

The method of claim 13 further comprising measuring

C1: a number of objects that were determined to represent valid internalization cell surface receptors (e.g. claim 15a)

C2: an aggregate area of the objects that were determined to represent valid internalized cell surface receptors (e.g. claim 15b)

C3: an aggregate intensity area of the objects that were determined to represent valid internalized cell surface receptors (e.g. claim 15c)

C4: a normalized aggregate intensity area of the objects that were determined to represent valid internalized cell surface receptors (e.g. claim 15d)

Claims 10-13, 16 and 34 are generic to this species

Species Elections Regarding Group III

One election from each of species G, H, and I is required.

Specie (G)

Where in the cell surface receptor protein is

A1: expressed as a luminescently labeled protein (e.g. claim 17)

A2: luminescently labeled by contancting the cell with a luminescently labeled molecule that binds to the cell surface receptor of interest (e.g. claim 17)

Specie (H)

The method of claim 5 further comprises

B1: removing artifacts from the object image (e.g. claim 22a)

B2: correcting from background luminescence (e.g. claim 22b)

Specie (I)

The method of claim 5 further comprising measuring

C1: a number of objects that were determined to represent valid internalization cell surface receptors (e.g. claim 23a)

C2: an aggregate area of the objects that were determined to represent valid internalized cell surface receptors (e.g. claim 23b)

C3: an aggregate intensity area of the objects that were determined to represent valid internalized cell surface receptors (e.g. claim 23c)

C4: a normalized aggregate intensity area of the objects that were determined to represent valid internalized cell surface receptors (e.g. claim 23d)

. Claims 18-21, 24 and 35 are generic to this species

Species Elections Regarding Group IV

One election from each of species J, K, and L is required.

Specie (J)

Where in the cell surface receptor protein is

A1: expressed as a luminescently labeled protein (e.g. claim 25)

A2: luminescently labeled by contancting the cell with a luminescently labeled molecule that binds to the cell surface receptor of interest (e.g. claim 25)

Specie (K)

The method of claim 29 further comprises

B1: removing artifacts from the object image (e.g. claim 30a)

B2: correcting from background luminescence (e.g. claim 30b)

Specie (L)

The method of claim 29 further comprising measuring

C1: a number of objects that were determined to represent valid internalization cell surface receptors (e.g. claim 31a)

C2: an aggregate area of the objects that were determined to represent valid internalized cell surface receptors (e.g. claim 31b)

C3: an aggregate intensity area of the objects that were determined to represent valid internalized cell surface receptors (e.g. claim 31c)

C4: a normalized aggregate intensity area of the objects that were determined to represent valid internalized cell surface receptors (e.g. claim 31d)

Claims 26-29, 32 and 36 are generic to this species

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. The species are distinct are they are directed to distinct method steps and thus present a different and clearly distinct search burden which is undue if searched together.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anna Skibinsky whose telephone number is (571) 272-4373. The examiner can normally be reached on 8 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on (571) 272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MARY K. ZEMAN
PRIMARY EXAMINER
AU 1631
12/12/05